MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

MVR 2013 – BEHAVIOURAL MODELLING

(All sections / Groups)

17 OCTOBER 2018
2.30 p.m. - 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 5 pages with 15 objective questions and 13 subjective questions only.

2. Answer **ALL sections**. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Section A
Objective Questions

(Total: 15 Marks)

Behavioral Modelling Introduction

1. The **UI** system allows you to create ____ fast and intuitively. This is an introduction to the major features of Unity's UI system.
   A. User interfaces
   B. Audio interfaces
   C. Users interfaces
   D. All of the above

2. Unity has a complex and powerful ____ for creating and combining particles to give you all sorts of special effects.
   A. Framework
   B. System
   C. Script
   D. All of the above

3. Which of the following statement is **TRUE** about 2D and 3D objects?
   A. 2D and 3D object is not in scene
   B. 2D object is in scene and pickable
   C. 2D object is not pickable (in scene)
   D. 3D object in not a game object

4. Which one of these is **invalid** operator?
   A. &&
   B. <=
   C. !=
   D. /=

5. Rigidbody components are include these following properties. **Except**?
   A. Mass
   B. Capacity
   C. Gravity
   D. Friction

Continued .....

6. Which one of these is function **not** included in unity3D?
   A. OnCollisionOut
   B. OnTriggerStay
   C. OnMouseExit
   D. OnDestroy

7. Which of the following is Light's **properties**?
   A. Zoom
   B. Intensity
   C. Range
   D. Deferred

8. ____ area common concept to all 3D applications, as they provide the means to set the **visual appearance** of a 3D model. From basic colors to reflective image-based surfaces.
   A. Physics
   B. Navigation
   C. Materials
   D. Audio

9. Which one of these virtual axes represents the mouse's **Left Click**?
   A. Mouse 0
   B. Mouse 1
   C. Mouse 2
   D. Mouse 3

10. How can you define a variable in **C#** to see it in inspector?
   A. private string myVariable;
   B. string myVariable;
   C. public myVariable;
   D. public string myVariable;

11. You will see this system in other 2D elements that you work with in Unity, like _____ **(GUI)** elements.

   A. Google User Interface
   B. Graphical User Interface
   C. Good User Interface
   D. All of the above

Continued .....

12. How can a method **invoked** in 5 seconds?
    A. Invoke (myMethod, 5000);
    B. Call (myMethod, 5000);
    C. Invoke (myMethod, 5);
    D. Call (myMethod, 5);

13. Which of these lines will cause an **Error** that will make it unable to play?
    A. Void start () {}
    B. Private GameObject gameObjectGO;
    C. getComponents<MyScript>();
    D. Void Update() {}

14. A **Mesh Renderer** must be present in order to draw surfaces onto the mesh of a 3D object. It is also in charge of the following?
    A. How the mesh responds to lighting
    B. Materials used on the surface to show color or textures
    C. Both
    D. None of the above

15. **Normal maps** are a means of creating virtual geometry for _____ calculations.
    A. Shader
    B. Rendering
    C. Lighting
    D. Polygons

Continued .....

Section B - Subjective Questions

Part 1: Answer any 5 (FIVE) questions ONLY.

(Total: 10 Marks)

1. Describe what is software development kit (SDK or devkit)?

(2 Marks)

2. Describe what is integrated development environment (IDE)?

(2 Marks)

3. Explain what is Rigidbody in Unity 3D?

(2 Marks)

4. Describe what is Game View components of Unity3D?

(2 Marks)

5. In Unity3D how can you hide gameobject using script?

(2 Marks)

6. Mention what is the function of Inspector in Unity 3D?

(2 Marks)

7. Explain what is Canvas in Unity3D?

(2 Marks)

8. Explain what is Raycast in Unity3D?

(2 Marks)

Part 2: Answer all questions.

(Total: 15 Marks)

Write down the Function Scripts for the following actions:

1. Print on the console the line 'Test one" when the boolean 'isShooting' is true.

(2 Marks)

2. Rotates the transform about axis passing through point in world coordinates by angle degrees (RotateAround).

(2 Marks)

3. Move the player to left position for as long as we are holding left arrow button on keyboard.

(2 Marks)

4. Moves a point currently in a straight line towards a target point (MoveTowards).

(2 Marks)

5. Have a Player GameObject that can be triggered when any GameObject that has the tag "Coin" enter it, adds 1 to a variable called 'TotalCoin' which originally is 0. And if 'Coin' reaches 50, turn on a canvas game finish and play the "you win" sound.

(7 Marks)

End of Page.